

```

%Male Rat Liver
%Simulates the posterior mean parameter values from the MCMC analysis
%Plots simulation against the in vitro data

prepare @all
MaleData
WESITG = 0 ;
WEDITG = 0 ;
CJVITG = 0 ;

kk = [];
fkk = [];
tt = [];
km = [];

VVIAL= 0.0119573;
VMED= 0.001;
VINJ=0.0003858;
VAIR=VVIAL-VMED;
TSTOP= 1.2; TF=0.; TI=0.2;
PROT = 1.0;
P1=0.69;

KG = 0.11 ;
RLOSS = 0.001424 ;
CINT = 0.01 ;
MAXT = 0.1 ;

%Male Rat Liver

for pp = IDm_264ppm : IDm_50ppm
    A10 = FratMLiver(1, pp)'*(VAIR+P1*VMED);

%MCMC Redo
    VMAX1 = 0.11 ; %0.26;
    KM1 = 1.0 ; %1.36;
    VK = 0.0 ;
    KG1 = 25.68 ;

    start @nocallback
        tt = [tt, _time];
        kk = [kk, _ca1];
        km = [km, _cm1];
    end % end of dose loop

    %Time 50 ppm      132 ppm      264 ppm
    mrl = [...
    0      2.0125      4.6755      9.824
    0.025 2.18      4.503 9.454
    0.05   1.634 4.318 8.939

```

```
0.1   1.354 3.918 9.767
0.15  1.113 3.708 9.603
0.2   0.893 3.217 7.856
0.225 0.931 3.007 7.581
0.25  0.706 2.885 7.02
0.3   0.545 2.559 7.925
0.35  0.419 2.478 7.679
0.4   0.291 2.0245    6.097
0.425 0.308 1.841 5.974
0.45  0.237 1.786 5.568
0.5   0.175 1.547 6.201
0.55  0.125 1.558 NaN
0.6   0.077 1.1375    4.637
0.625 0.082 1.01   4.584
0.65  0.067 0.995 4.231
0.7   0.048 0.837 NaN
0.75  0.034 0.708 NaN
0.8   0.0195 0.5715    3.482
0.825 0.02  0.483 3.428
0.85  0.018 0.489 3.18
0.9   NaN   0.397 NaN
0.95 0.009 NaN   NaN];
```

```
plot(tt(:,3), kk(:,3), tt(:,2), kk(:,2), tt(:,1), kk(:,1), ...
mrl(:,1), mrl(:,2), mrl(:,1), mrl(:,3),mrl(:,1),
mrl(:,4),'maleratliver.aps');
```